



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada
Tel (613) 632-5200

C10
Job Sheet 171946



Part No: C10 Job Qty: 1 ea
Part Name: C-Series Remote Hook 10,000 lbs Lift Capacity



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 2/9/18

Job Tracking No:

Due Date: 2/23/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: IPP REV:A 17.10.23 NEW ISSUE DD VER:F:DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Start up Operation	1 Ea		2/22/18	0.00	0.00	Start Up Small Fab-4		SP
110	Small Fab	1 pcs		2/23/18	0.00	2.00	Small Fab-9		AP
120	QC	1 pcs		2/23/18	0.00	0.00	QC5		PO 1302-14
130	DC	1 pcs		2/23/18	0.00	0.00	DC		
140	Packaging	1 pcs		2/23/18	0.00	0.00	Packaging3-2		DSMS
200	QC21-FG	1 Ea		2/23/18	0.00	0.00	QC21		21 FEB 15 2018

Part Op 110 - 1- PICK C10-2 AND LASER ENGRAVE AS PER DWG . SEE NOTE 3 AND 4 ON SHEET 3. 2- ASSEMBLE AS
Descriptions: PER DWG 3- PERFORM ALL NECESSARY TEST USING FAI TEST SHEET.
130 - Photocopy blue file and create labels

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
188-FPSS-1/4-20-3/8	Set Screw	2 Ea (2 ea)	100-Start up Operation	5038424
188-FPSS-1032-1/4	Set Screw	2 Ea (2 ea)	110-Small Fab	5010651
188-SHCS-1032-3/4	Bolt	8 Ea (8 ea)	110-Small Fab	5041614
2595K2	Heat Shrink	1 (1 ea)	110-Small Fab	5041617
32446	Crimp Terminal	2 Ea (2 ea)	110-Small Fab	5041619
32448	16-14 AWG Knife Connector	2 (2 ea)	110-Small Fab	5041618
600.1309 -AP	CANAM Plate ID Label	1 (1 ea)	110-Small Fab	5029592
600.1347	C10 Warning Label	1 (1 ea)	110-Small Fab	5029487
AN4-23A	Bolt	2 Ea (2 ea)	110-Small Fab	F123434-40
AN6-31A	Bolt	6 Ea (6 ea)	110-Small Fab	5041084
C10-1	Side Plate Solenoid Side	1 (1 ea)	110-Small Fab	5029188
C10-10-1	Actuator Shaft	1 (1 ea)	110-Small Fab	5029185
C10-10-2	Actuator Pin	1 (1 ea)	110-Small Fab	5029190
C10-10-3	Actuator Bushing	2 (2 ea)	110-Small Fab	5029191
C10-11	Manual Release Knob	1 (1 ea)	110-Small Fab	5029192
C10-12	Solenoid Assembly (Figure 4)	1 (1 ea)	110-Small Fab	5029193
C10-12-0	Solenoid	1 (1 ea)	110-Small Fab	5029434
C10-12-1	Spring Pin	1 (1 ea)	110-Small Fab	5029194
C10-2	Side Plate - MRK	1 (1 ea)	110-Small Fab	5029195
C10-21-1	Clock Spring	2 (2 ea)	110-Small Fab	5029196
C10-21-2	Spring Cover	2 (2 ea)	110-Small Fab	5029197
C10-21-4	Lock Washer	8 Ea (8 ea)	110-Small Fab	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																							
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval																																																					
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Root Cause <table style="width:100%;"> <tr><td>Environment</td><td>☐</td><td>No Re-verification</td><td>☐</td></tr> <tr><td>Design</td><td>☐</td><td>Operator</td><td>☐</td></tr> <tr><td>Doc/Data</td><td>☐</td><td>Offset/Setup</td><td>☐</td></tr> <tr><td>Equip/Tooling</td><td>☐</td><td>Supplier</td><td>☐</td></tr> <tr><td>Handling/Pre</td><td>☐</td><td>Training</td><td>☐</td></tr> <tr><td>Material</td><td>☐</td><td>Use for Testing</td><td>☐</td></tr> <tr><td>Internal Transport</td><td>☐</td><td>Poor Information</td><td>☐</td></tr> <tr><td>Tribal Knowledge</td><td>☐</td><td>Rushing</td><td>☐</td></tr> <tr><td>LOA</td><td>☐</td><td>Product Improvement</td><td>☐</td></tr> <tr><td>Substation</td><td>☐</td><td>Process Improvement</td><td>☐</td></tr> <tr><td>Past Expiry Date</td><td>☐</td><td>Manufacturing Process</td><td>☐</td></tr> <tr><td>Misidentified</td><td>☐</td><td>Past Due</td><td>☐</td></tr> </table>		Environment	☐	No Re-verification	☐	Design	☐	Operator	☐	Doc/Data	☐	Offset/Setup	☐	Equip/Tooling	☐	Supplier	☐	Handling/Pre	☐	Training	☐	Material	☐	Use for Testing	☐	Internal Transport	☐	Poor Information	☐	Tribal Knowledge	☐	Rushing	☐	LOA	☐	Product Improvement	☐	Substation	☐	Process Improvement	☐	Past Expiry Date	☐	Manufacturing Process	☐	Misidentified	☐	Past Due	☐	<table style="width:100%;"> <tr> <td> Crimp/Kinking ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ </td> <td> Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ </td> <td> ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center </td> <td> ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence </td> </tr> </table>				Crimp/Kinking ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center	☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence
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OTHER : _____																																																									

C10-22	Lock Bumper	3 Ea (3 ea)	110-Small Fab	5029198
C10-23	Keeper Weldment	1 (1 ea)	110-Small Fab	5029199
C10-23-1	Keeper Spacer	1 (1 ea)	110-Small Fab	5029200
C10-23-2	Keeper Spring	1 Ea (1 ea)	110-Small Fab	5029201
C10-23-3 Kit	Keeper Bushing	2 (2 ea)	110-Small Fab	5029204
C10-3	Load Beam Bumper	1 (1 ea)	110-Small Fab	5029205
C10-4	Lock	1 (1 ea)	110-Small Fab	5029208
C10-4-10	Spring Anchor Spring Pin	2 (2 ea)	110-Small Fab	5029209
C10-4-11	Lock Shaft	1 (1 ea)	110-Small Fab	5029210
C10-4-2	Lower Lock Roller	1 (1 ea)	110-Small Fab	5029212
C10-4-3	Upper Lock Roller	1 (1 ea)	110-Small Fab	5029213
C10-4-4	Upper Lock Roller Shaft	1 (1 ea)	110-Small Fab	5029214
C10-4-5	Lower Lock Roller Shaft	1 (1 ea)	110-Small Fab	5029215
C10-4-6	Lock Spring	1 (1 ea)	110-Small Fab	5029216
C10-4-7	Spring Retaining Pin	1 (1 ea)	110-Small Fab	5029217
C10-4-8	Lock Bushing	2 (2 ea)	110-Small Fab	5029218
C10-4-9	Upper Roller DU Bearing	1 (1 ea)	110-Small Fab	5029207
C10-41	Stain Relief Connector	1 Ea (1 ea)	110-Small Fab	5029219
C10-5A	Load Beam Assembly	1 (1 ea)	110-Small Fab	5029220
C10-7	Locating Pin	3 (3 ea)	110-Small Fab	5029221
C10-8	Trunnion Bushing	2 (2 ea)	110-Small Fab	5029222
C10-9-1	Latch	1 (1 ea)	110-Small Fab	5029223
C10-9-2	Latch Bearing Torrington	1 Ea (1 ea)	110-Small Fab	5029224
C10-9-4	Latch Shaft Bearing	2 (2 ea)	110-Small Fab	5029225
C10-9-5	Latch Shaft	1 (1 ea)	110-Small Fab	5029226
C10-9-6	Latch Return Spring	2 (2 ea)	110-Small Fab	5029227
C2-14-2	Label Rivets	2 Ea (2 ea)	110-Small Fab	5029228
C3-12-6	Lock Roller Pin Circlip	2 (2 ea)	110-Small Fab	5029229
C45-12-6	Retaining Ring	2 (2 ea)	110-Small Fab	5029230
C45-8-4	Solenoid Cover Gasket	1 (1 ea)	110-Small Fab	5029231
C45-8-4	Solenoid Cover Gasket	1 (1 ea)	110-Small Fab	5029232
C45-8-5	Solenoid Cover	1 Ea (1 ea)	110-Small Fab	5029233
EL-PLUG-M	3-Prong Male Spade Plug	1 Ea (1 ea)	110-Small Fab	5029234
EL314-SJTOW	3 Wire	1 ft (1 ea)	110-Small Fab	5029235
MS21044N6	Nut, Self-Lock .375-24,UNJF-3B	6 Ea (6 ea)	110-Small Fab	5029236
MS21083N4	Nut	2 Ea (2 ea)	110-Small Fab	5029237
MS27039-4-08	Screw	1 Ea (1 ea)	110-Small Fab	5029238
NAS1149F0432P	Washer	2 Ea (2 ea)	110-Small Fab	5029239
NAS1149F0463P	Washer	3 Ea (3 ea)	110-Small Fab	5029240
NAS1149F0632P	Washer	12 Ea (12 ea)	110-Small Fab	5029241

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Start up Operation	188-FPSS-1/4-20-3/8	2	100	0
110-Small Fab	188-FPSS-1032-1/4	2	25	0
	188-SHCS-1032-3/4	8	0	0
	2595K2	1	0	0
	32446	2	0	0
	32448	2	0	0
	600.1309	1	0	0
	600.1347	1	0	0
	AN4-23A	2	632	0
	AN6-31A	6	0	0
	C10-1	1	0	0
	C10-10-1	1	0	0
	C10-10-2	1	0	0
	C10-10-3	2	0	0
	C10-11	1	0	0
	C10-12	1	0	0
	C10-12-0	1	0	0
	C10-12-1	1	0	0
	C10-2	1	0	0
	C10-21-1	2	0	0
	C10-21-2	2	0	0
	C10-21-4	8	100	0

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date : _____		Step #: _____		QTY Effective : _____		MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval			
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

C10-22	3	0	0
C10-23	1	0	0
C10-23-1	1	0	0
C10-23-2	1	0	0
C10-23-3	2	0	0
C10-3	1	0	0
C10-4	1	0	0
C10-4-10	2	0	0
C10-4-11	1	0	0
C10-4-2	1	0	0
C10-4-3	1	0	0
C10-4-4	1	0	0
C10-4-5	1	0	0
C10-4-6	1	0	0
C10-4-7	1	0	0
C10-4-8	2	0	0
C10-4-9	1	0	0
C10-41	1	20	0
C10-5A	1	0	0
C10-7	3	0	0
C10-8	2	0	0
C10-9-1	1	0	0
C10-9-2	1	11	0
C10-9-4	2	0	0
C10-9-5	1	0	0
C10-9-6	2	0	0
C2-14-2	2	200	0
C3-12-6	2	0	0
C45-12-6	2	0	0
C45-8-4	2	0	0
C45-8-5	1	0	0
EL-PLUG-M	1	38	0
EL314-SJTOW	1	250	0
MS21044N6	6	0	0
MS21083N4	2	0	0
MS27039-4-08	1	100	0
NAS1149F0432P	2	1,586	0
NAS1149F0463P	3	158	0
NAS1149F0632P	12	60	0

Part Specifications

Specifications could not be found.

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Root Cause		FAULT CATEGORY																							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																				
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Past Expiry Date ☐	Manufacturing Process ☐																								
Misidentified ☐	Past Due ☐	OTHER : _____																							

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Remote Cargo Hook Test Form

C10

Work Order _____

 Customer 171946

 Serial Number S041414

 Date 2018/02/13

# of Releases	Load (Lbs.)	Release Method	Remarks	Result	Pass/fail
1	25,000	Static Hold	Hold for two Minutes and reduce load to zero	N/A	PASS
10	5,000	Electircal, 25 volts	No "hang ups" permitted	N/A	PASS
2	10,000	Electircal, 22 volts	Current shall not exceed 12.4A	9.0 Amp.	PASS
2	7,500	Electircal, 22 volts	Current shall not exceed 12.4A	9.0 Amp.	PASS
2	5,000	Electircal, 22 volts	Current shall not exceed 12.4A	9.0 Amp.	PASS
2	2,500	Electircal, 22 volts	Current shall not exceed 12.4A	9.0 Amp.	PASS
2	500	Electircal, 22 volts	Current shall not exceed 12.4A	9.0 Amp.	PASS
1	10,000	Electircal, 20 volts	Current shall not exceed 11.3A	8.4 Amp.	PASS
1	10,000	Electircal, 28 volts	Current shall not exceed 15.8A	11.5 Amp.	PASS
1	10,000	Manual		N/A	PASS
1	10,000	Impact Test	Impact shackle 10 times, shall not release	N/A	PASS
1	N/A	Solenoid Ohms	Shall not exceed 1.7-2.0 Ohms	2.0 Ohms	PASS
1	N/A	Electircal Continuity	Across both wires	N/A	PASS

 Test Conducted By ALAIN PATRY
 Technician

 Signature: [Signature]
 Director of Quality Assurance

Submit